RTCA Free Flight Select Committee Safe Flight 21 Steering Committee

Eurocontrol ADS Programme

ADS-B Technical Link Assessment Team (TLAT)

Technical Link Assessment Report March 2001

APPENDIX K - Attachment 2

1090 MHz Extended Squitter Simulation Results Volpe/APL Model

Slide 1



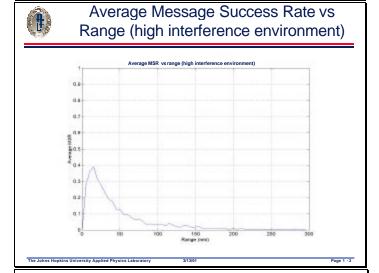
Message Interference Levels (ATCRBS)

	LA 99	LA 2020	LA 2020
	(maximum measured)	(High interference simulated)	(Low interference simulated)
>= -80 dB	12442/sec	<25000/sec	<9000/sec
>= -84 dB	20775/sec	<45000/sec	<16000/sec

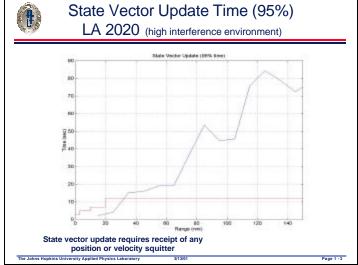
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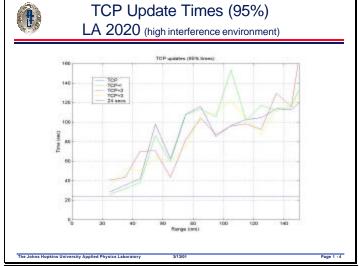
Slide 2



Slide 3



Slide 4



Slide 5



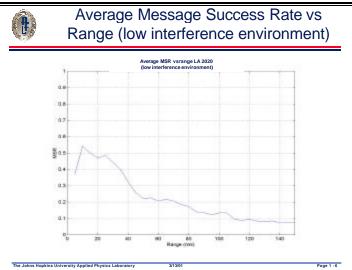
Observations on LA 2020 Results (high interference environment)

- ATCRBS fruit rates are about twice LA 99 measured values
- State vector 95% update times exceed MASPS/Eurocontrol limit at around 30 miles
- TCP 95% update times exceed MASPS/Eurocontrol limit at all ranges

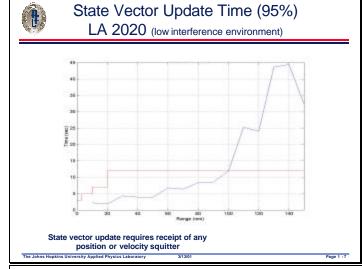
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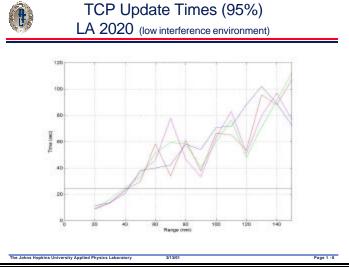
Slide 6



Slide 7



Slide 8



Slide 9



Observations on LA 2020 Results

(low interference environment)

- ATCRBS fruit rates are less than LA 99 measured values
- State vector 95% update times exceed MASPS/Eurocontrol limit at 100 miles
- TCP 95% update times exceed MASPS/Eurocontrol limit at 40 miles

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